Simon

## CARNEGIE INSTITUTE OF TECHNOLOGY

## SCHENLEY PARK

## PITTSBURGH 13, PENNSYLVANIA

April 30, 1963

GRADUATE SCHOOL OF INDUSTRIAL ADMINISTRATION

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MAY 3 1963

Professor George E. Forsythe Director, Computer Science Division Department of Mathematics Stanford University Stanford, California

Dear Professor Forsythe:

Marvin Minsky's qualifications for the position you describe in your letter of April 23 are outstanding in two respects. He is one of the most intelligent persons I have ever met, and he is one of the most sophisticated in the country today in the field of artificial intelligence. On the other hand, his scientific production has not matched his capabilities. He has published little, and most of that, except possibly for one or two of his recent mathematical papers, is excellent exposition but not original research.

The conclusion I would draw is that Minsky would be an excellent appointment if what you are primarily looking for is someone who will be very knowledgeable about current developments in his field, and highly stimulating to graduate students, but who will make his contributions to knowledge largely as an "idea man" for students and colleagues rather than by direct research production. Any faculty can use some such people, but would be in trouble if it had no other kind; only you can judge the balance at Stanford in Minsky's general area. My comment on rank would follow from this: if Minsky is the right man for you, then his general professional reputation in the field of artificial intelligence would certainly justify your offering him a full Professorship.

You ask me to compare him with other possible candidates. Your mention of medicine brings Ledley to mind. I know him only by his publications. From these, I would judge him to be lively, prolific, but not very deep. I think I would pick Minsky in preference to him. Most of the other names that come to my mind are people interested in psychology rather than artificial intelligence. I will mention just two other people that might possibly fill the bill.

Oliver Selfridge of Lincoln Laboratories resembles Minsky in both intelligence and sophistication, and has the same record of stimulating others. He did pioneering work on pattern recognition, and is generally credited with several ideas that others at Lincoln have executed. I don't know at all what teaching experience he has had, if any. On balance, I guess I would slightly prefer Minsky for the position you describe, but would be hard pressed to defend my choice. John McCarthy, who knows both of them well, could presumably make a more responsible judgment.

Leonard Uhr, in the Institute for Mental Health Research, at Michigan, is somewhat narrower than Minsky in his view of the field, and is not brilliant, but has done some impressive work in pattern recognition, and is productive.

There are a number of others, I am sure, particularly in non-academic settings, but no really outstanding names come to my mind. When you subtract out the psychologists at the one end, and men interested in programming languages at the other--neither of whom would be particularly appropriate for the position as described--precious few people are left in the middle.

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Sincerely yours,

Herbert A. Simon

Professor of Administration

and Psychology

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